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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,927	02/26/2008	Philippe Ceulemans	4021-9US	2334
86022	7590	03/16/2010	EXAMINER	
Jerold I. Schneider			CHIN, HUI H	
525 Okeechobee Blvd.				
Suite 1500			ART UNIT	PAPER NUMBER
West Palm Beach, FL 33401			1796	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,927	Applicant(s) CEULEMANS ET AL.	
	Examiner HUI CHIN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The office action is in reference to the Amendment, filed on 12/22/2009.

Claims 19-41 are now pending.

2. In view of the Response, the previous rejection of claims 19-23, 25-31, and 33-41 under 35 U.S.C. 103(a) as being unpatentable over Duerr (US Patent 5,512,618) in view of Hawrylko (US 2002/0033116) and claims 24 and 32 under 35 U.S.C. 103(a) as being unpatentable over Duerr (US Patent 5,512,618) in view of Hawrylko (US 2002/0033116), and further in view of Charbonneau et al. (US Patent 4,404,246) are withdrawn.

Claim Objections

3. Claims 19, 24, 29, 31 and 38-40 are objected to because of the following informalities:

Claim 19, line 12: "OH" is suggested to be changed to -- OR --;

Claim 19, line 14: "C10-C30" is suggested to be changed to -- C₁₀-C₃₀ --;

Claim 24, line 2: "C10-C20" is suggested to be changed to -- C₁₀-C₂₀ --;

Claim 31, line 3: delete "claim 1";

Claim 31, line 4: "75-100," is suggested to be changed to -- 75-100 --;

Claim 39, line 2: "20-80," is suggested to be changed to -- 20-80 --;

Claim 40, line 4: "1-25," is suggested to be changed to -- 1-25 --.

Appropriate corrections are required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 29 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The “preferably” makes the claim unclear.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by “such as” and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 29 recites the broad recitation 0.05 wt.%, and the claim also recites 0.001 wt.% which is the narrower statement of the range/limitation; claim 29 recites the broad recitation 5 wt.%, and the

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claim also recites 1 wt.% which is the narrower statement of the range/limitation; claim 29 recites the broad recitation 1 wt.%, and the claim also recites 0.5 wt.% which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 19-23, 25-31, and 33-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duerr (US Patent 5,512,618) in view of Hawrylko (US Patent 4,727,091).

Duerr discloses a liquid adhesive composition for manufacturing corrugated paperboard, consisting essentially of: an effective amount of a starch whose chemical composition is characterized by having a substantially straight-chain configuration; a suspension-enhancing agent which includes a synthetic liquid polymer component that is a copolymer based upon an acrylic-acid monomer and an aromatic monomer substituted with an acrylate compound, and includes an effective amount of the alcohol-ester coalescing agent 2,2,4-trimethyl-1,3-pentanediol mono(2-methylpropanoate), and which polymer component is emulsifiable in the composition, and is capable of enhancing suspension of such starch; water; and with the overall composition including

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between 0.5%-1.0% by weight of the suspension-enhancing agent, between 21.5-25.5% by weight of the starch, and between 73.5-78% by weight of the water (claim 1).

However, Duerr is silent on a specific crosslinking agent.

Hawrylko discloses polymeric dispersants which are derived from polymers produced by the polymerization of the α,β -monoolefinically unsaturated carboxylic acids. The preferred carboxylic acids are those derived from the acrylic acids and α -substituted acrylic acids having the general formula



wherein R is a monovalent substituent selected from the group consisting of hydrogen, halogen, hydroxyl, carboxyl, amide, ester, lactone, and lactam wherein the crosslinking agents which may be employed with any of the carboxylic monomers, or mixtures thereof, may be any compound, not necessarily monomeric in nature, containing two or more terminal polymerizable $\text{CH}_2 = \text{C} <$ groups per molecule such as dimethyl allyl ether, pentaerythritol, and polyalkenyl polyethers to provide efficient polymeric dispersants which are prepared from the lightly crosslinked interpolymers of acrylic acid (col. 5, lines 14-65). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use this specific crosslinking agent in the composition with the expected success.

The limitations of claim 23 can be found in Duerr at claim 1, where it discloses the acrylic acid.

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The limitations of claim 24 can be found in Duerr at claim 1, where it discloses the acrylate compound.

Claim 27 is an inherent property.

The limitations of claim 28 can be found in Duerr at claim 1, where it discloses the starch.

The limitations of claim 29 can be found in Duerr at Table 1, where it discloses the 0.5 to 1% of acrylic acid.

The limitations of claim 30 can be found in Duerr at claim 1 and Table 1, where it discloses the 21.5 – 25.5% by weight of the starch, 73.5 - 78% by weight of the water, 0.2 - 0.5% by weight of sodium hydroxide, and 0.2 - 0.5% by weight of boric acid.

The limitations of claim 31 can be found in Duerr at claim 2, where it discloses the process.

The limitations of claims 33-37 can be found in Duerr at col. 4, lines 64-67, col. 5, lines 1-25, where it discloses the process for making the paper board and card board.

The limitations of claim 38 can be found in Duerr at Table 1, where it discloses the composition.

The limitations of claim 39 can be found in Duerr at Table 1, where it discloses the 21.5-25.5% by weight of starch.

The limitations of claims 40 and 41 can be found in Duerr at Table 1, where it discloses the 1.8 % by weight of boric acid in the solid premix.

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8. Claims 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duerr (US Patent 5,512,618) in view of Hawrylko (US 2002/0033116) as applied to claims 19-23, 25-31, and 33-41, and further in view of Charbonneau et al. (US Patent 4,404,246).

The disclosure of Duerr in view of Hawrylko is adequately set forth in paragraph 8 and is incorporated herein by reference.

However, Duerr in view of Hawrylko is silent on a specific alkyl acrylate.

Charbonneau et al. disclose a tape comprising a carrier web and a pressure-sensitive adhesive layer comprising a copolymer of acrylic acid ester such as isooctyl acrylate and at least one copolymerizable monoethylenic monomer to provide excellent adhesion and holding power and experiences no observable deterioration even after years of storage (claim 1, col. 1, lines 17-19, col. 3, lines 45-46). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use this specific alkyl acrylate in the composition with the expected success.

9. Claims 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duerr (US Patent 5,512,618) in view of Hawrylko (US 2002/0033116) as applied to claims 19-23, 25-31, and 33-41, and further in view of Columbus et al. (US Patent 5,322,880).

The disclosure of Duerr in view of Hawrylko is adequately set forth in paragraph 8 and is incorporated herein by reference.

However, Duerr in view of Hawrylko is silent on a specific clarification agent.

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Columbus et al. disclose an adhesive gel comprising: (1) about 70% to 93% of water; (2) about 5% to 25% of a partially hydrolyzed polyvinyl alcohol; (3) about 0.5% to 3% of a water soluble plasticizer for the polyvinyl alcohol; (4) a water soluble defoamer which reads on clarification agent in an amount sufficient to prevent air bubbles from destroying the clarity of the gel to provide an adhesive gel for porous and semiporous substrates such as paper, card board, cloth and wood (claim 1, col. 1, lines 11-13). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use this specific clarification agent in the composition with the expected success.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUI CHIN whose telephone number is (571)270-7350. The examiner can normally be reached on Monday to Friday; 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ling-Siu Choi/
Primary Examiner, Art Unit 1796

/HC/